



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

July 19, 2007

MEMORANDUM

SUBJECT: Effects Determinations for Metam Sodium Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Mah Shamim, Ph.D.
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Environmental Fate and Effects Division

M. Shamim 07/19/07

TO: Arthur-Jean B. Williams, Associate Director
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential adverse modification to designated critical habitat from uses of the fumigant metam sodium. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA¹).

The attached assessment was conducted consistent with the Agency's Overview Document². Effects determinations for this assessment are summarized below:

Uses of metam sodium are likely to adversely affect (LAA) the California red-legged frog, and result in habitat modification of critical habitat based on the following determinations.

- Uses of metam sodium for six scenarios (strawberry, tomato, leafy vegetables, nursery, onions and turf) using sprinkler irrigation are likely to adversely affect (LAA) the aquatic phase of California red-legged frog directly.
- Uses of metam sodium for four scenarios (strawberry, tomato, leafy vegetables, and

¹ Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL)).

² Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

turf) using sprinkler irrigation are likely to adversely affect (LAA) the aquatic phase of California red-legged frog indirectly and may result in habitat modification of critical habitat.

- Uses of metam sodium for sprinkler irrigation are likely to adversely affect (LAA) the terrestrial phase of California red-legged frog indirectly and may result in habitat modification of critical habitat.
- Uses of metam sodium for shank injection are likely to adversely affect (LAA) the California red-legged frog indirectly and may result in habitat modification of critical habitat.

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included one other scientist who has been trained by the Services to make such determinations (Edward Odenkirchen, Ph.D.).

Please let me know if you have any questions regarding this assessment and effects determination for chloropicrin relative to the CRLF and its designated critical habitat.

cc: Steven Bradbury
Peter Caulkins

Attachments